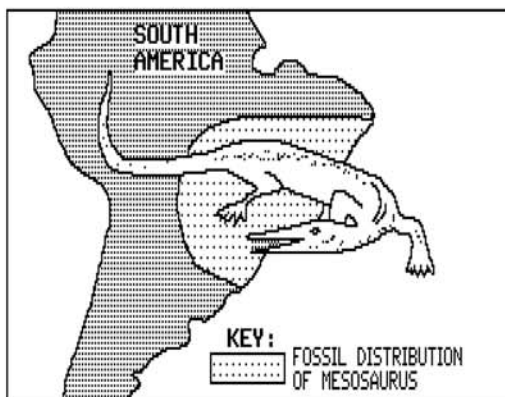






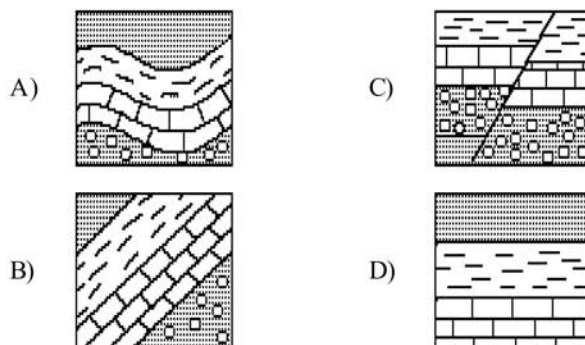
Name: \_\_\_\_\_

- 1) According to the "Inferred Position of Earth Landmasses" information shown in the *Earth Science Reference Tables*, on what other landmass would you most likely find fossil remains of the late Paleozoic reptile called Mesosaurus shown below?

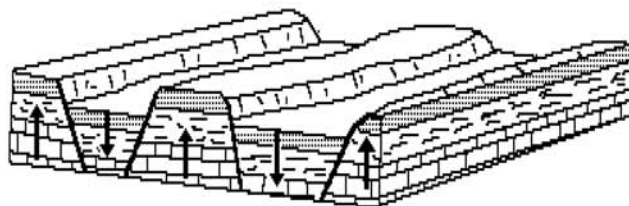


- A) North America 
- B) Antarctica 
- C) Eurasia 
- D) Africa 
- 2) A sandstone layer is found tilted at an angle of  $75^\circ$  from the horizontal. What probably caused this  $75^\circ$  tilt?
- A) The sediments that formed this sandstone layer were originally deposited at a  $75^\circ$  tilt.
- B) Nearly all sandstone layers are formed from wind-deposited sands.
- C) This sandstone layer has recrystallized due to contact metamorphism.
- D) This sandstone layer has changed position due to crustal movement.
- 3) Which is the best evidence that the Earth's crust has been uplifted?
- A) shallow-water fossils found at great ocean depths
- B) marine fossils found at high elevations above sea level
- C) younger fossils above older fossils in layers of rock
- D) marine fossils found in horizontal sedimentary layers

- 4) Which evidence does *not* support the theory that Africa and South America were once part of the same large continent?
- A) correlation of coastlines on opposite sides of the Atlantic Ocean
- B) correlation of living animals on opposite sides of the Atlantic Ocean
- C) correlation of rocks on opposite sides of the Atlantic Ocean
- D) correlation of fossils on opposite sides of the Atlantic Ocean
- 5) Folded sedimentary rock layers are usually caused by
- A) deposition of sediments in folded layers
- B) a rise in sea level after deposition
- C) crustal movement occurring after deposition
- D) differences in sediment density during deposition
- 6) The diagrams below show cross sections of exposed bedrock. Which cross section shows the *least* evidence of crustal movement?



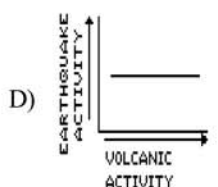
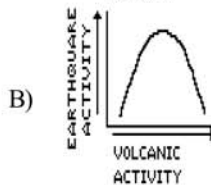
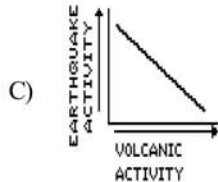
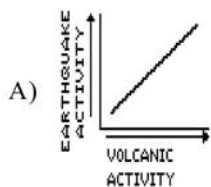
- 7) The landscape shown in the diagram below is an area of frequent earthquakes.



This landscape provides evidence for

- A) differential erosion of hard and soft rocks of the crust
- B) converging convection cells within the rocks of the mantle
- C) density differences in the rocks of the mantle
- D) movement and displacement of the rocks of the crust
- 8) Recent volcanic activity in different parts of the world supports the inference that volcanoes are located mainly in
- A) the centers of landscape regions
- B) the central regions of continents
- C) zones of crustal activity
- D) zones in late stages of erosion

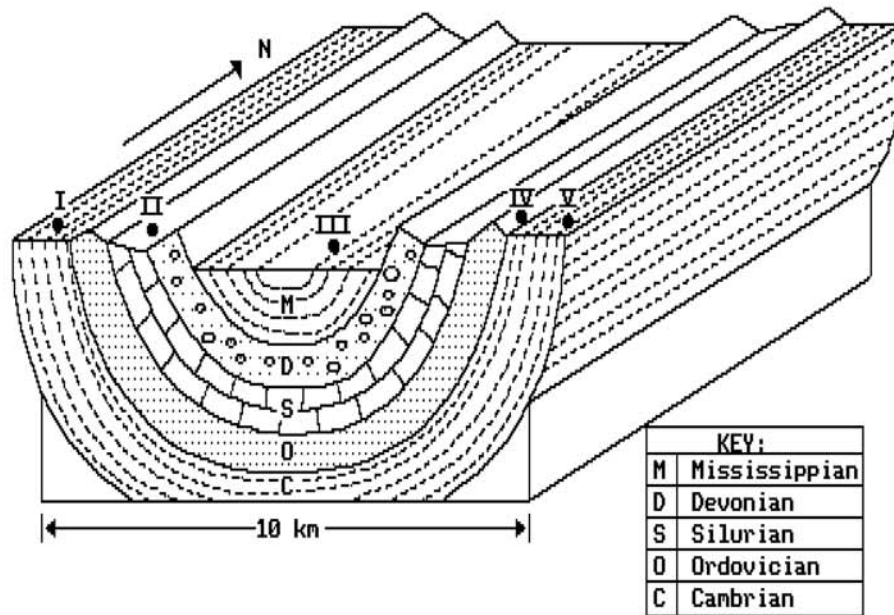
- 9) Which graph best represents the relationship between volcanic activity and earthquake activity in an area?



- 10) As evidence accumulates, the support for the theory that the present continents were at one time a single, large landmass
- increases
  - decreases
  - remains the same
- 11) Two geologic surveys of the same area, made 50 years apart, showed that the area had been uplifted 5 centimeters during the interval. If the rate of uplift remains constant, how many years will it take for this area to be uplifted a total of 70 centimeters?
- 500 years
  - 250 years
  - 350 years
  - 700 years
- 12) A large belt of mountain ranges and volcanoes surrounds the Pacific Ocean. Which events are most closely associated with these mountains and volcanoes?
- earthquakes
  - sandstorms
  - hurricanes
  - tomadoes
- 13) Shallow-water fossils are found in rock layers that are deep beneath the ocean floor. This suggests that
- the surface water cooled off, killing the organisms
  - shallow-water organisms always migrate to the deeper waters to die
  - parts of the ocean floor have subsided
  - parts of the ocean floor have been uplifted
- 14) An observer discovers shallow-water marine fossils in rock strata at an elevation of 5,000 meters. What is the best explanation for this observation?
- Violent earthquakes caused crustal subsidence.
  - The level of the ocean was once 5,000 meters higher.
  - Marine organisms have evolved.
  - Crustal uplift has occurred in the area.

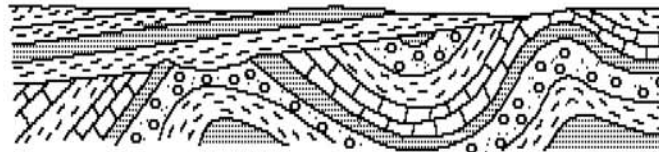
- 15) Fossils of organisms that lived in shallow water can be found in horizontal sedimentary rock layers at great ocean depths. This fact is generally interpreted by most Earth scientists as evidence that
- organisms that live in deep water evolved from species that once lived in shallow water
  - the cold water deep in the ocean kills shallow-water organisms
  - sunlight once penetrated to the deepest parts of the ocean
  - sections of the Earth's crust have changed their elevations relative to sea level
- 16) Which statement best supports the theory of continental drift?
- Areas of shallow-water seas tend to accumulate sediment, which gradually sinks.
  - Basaltic rock is found to be progressively younger at increasing distances from a mid-ocean ridge.
  - Marine fossils are often found in deep-well drill cores.
  - The present continents appear to fit together as pieces of a larger landmass.
- 17) Which best describes a major characteristic of *both* volcanoes and earthquakes?
- They are related to the formation of glaciers.
  - They are restricted to the Southern Hemisphere.
  - They are located in the same geographic areas.
  - They are centered at the poles.
- 18) The best evidence of crustal movement would be provided by
- weathered bedrock found at the bottom of a cliff
  - ripple marks found in sandy sediment
  - marine fossils found on a mountaintop
  - dinosaur tracks found in the surface bedrock
- 19) Which statement best explains why shark's teeth have been found in the bedrock of some mountainous regions?
- Sharks were once amphibious animals.
  - The area was once below sea level.
  - A type of shark existed on land in early times.
  - Shark remains were transported great distances before being deposited.
- 20) The presence of marine fossils at elevations high above sea level provides good evidence for
- continental glaciation
  - crustal uplift
  - crustal erosion
  - volcanic eruptions

- 21) The block diagram below shows a section of the Earth's crust. The rock layers have not been overturned. I, II, III, IV, and V are locations on the Earth's surface.



The deformed rock strata in the block diagram above are primarily the result of

- A) folding                      B) faulting                      C) ground water                      D) volcanism
- 22) The diagram below represents a cross section of a portion of the Earth's crust.



Which past activity in this region is suggested by the shape of these sedimentary rock layers?

- A) crustal movements                      C) glacial deposition  
 B) widespread volcanic activity                      D) horizontal sorting